

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.





**Larva**



**Adult**

## SEND SPECIMENS FOR IDENTIFICATION

If you find in your grain any fuzzy larvae of the type shown here, capture adult insects found near them, and send both larvae and insects for identification to—

Insect Identification and Parasite  
Introduction Section, ARS  
U. S. Department of Agriculture  
Beltsville, Md.

## HOW TO PACK AND MAIL

Place specimens in rubbing alcohol, or 75 percent grain alcohol if available. Use either a glass or plastic vial that will hold alcohol without leaking. Pack in cotton and place in small box or mailing tube.

- Be sure to: (1) Place your return address on the package.  
(2) Indicate that you suspect this to be the khapra beetle.

**DO NOT SEND LIVE SPECIMENS THROUGH THE MAIL**

### FOR POSTING ON BULLETIN BOARDS

This folder may be posted in public buildings or in conspicuous places where it will be seen by farmers, grain dealers, and others handling grain.  
You are at liberty to reprint this folder.

Limited supplies of the folder are available upon request to—

Stored-Product Insects Section, AMS U. S. Department of Agriculture Washington 25, D. C.

**LARVA**  
Enlarged 40 times,  
actual length 1/8 inch

**ADULT**  
Enlarged 40 times, ac-  
tual length 1/16 inch

**HAVE YOU  
SEEN THIS  
IN YOUR  
GRAIN**



These are cast skins of the **KHAPRA BEETLE**, in barley. This destructive grain pest is new to the United States, and is capable of causing great damage to our stored grain. The USDA and your State agriculture officials need your help to find how far this insect has spread already, so they can help wipe it out before it spreads further. This is the size the skins would look under a reading glass.

U. S. DEPARTMENT OF AGRICULTURE  
January 1955  
PA-261



## THE KHAPRA BEETLE

The KHAPRA BEETLE (*Trogoderma granarium* Everts), native of India, Ceylon, and Malaya, has already spread from Japan, the Philippines, and Australia, to England, Europe, and Africa. Now this pest has been found in stored grain in California, Arizona, and New Mexico. Help us locate any other areas where it might have a foothold, before it spreads all through our grain-producing areas.

This insect belongs to the same family as the carpet beetles often found in dwellings. It is usually first noticed because of the presence of its fuzzy larvae, or their cast skins, in clusters around the corners of grain bins, or in used sacks. It is spread from place to place in grain, feed, seed, or used sacks. It will probably be found only indoors, in warehouses, storage bins, or mills, or in railway cars or trucks used to transport grain, or similar places.

Like the rice and granary weevils, it can attack sound kernels of grain.

### These Grain Kernels Were Damaged by the Khapra Beetle



### Hand-Sift Grain

Look near the edges of a grain pile or next to the wall of grain bins, loaded freight cars, or other storage places. Take a double handful of grain, shake lightly and let grain sift through fingers. If khapra beetles are present, you may find the fuzzy larvae or the cast skins clinging to the skin of your hands.

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# How To Look for Khapra Beetle



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### Screen Sweepings

When a freight car, truck, or grain bin is emptied, screen a handful of sweepings through window screen and examine for larvae or cast skins.

### Check Bag Corners

Examine the outer surfaces of bagged grain, seed, or screenings, for larvae or cast skins. Pay particular attention to the top seam and the inside of the ears of the bag.

### Examine Grain Bins

Examine corners next to wall studs, rafters, and similar places in grain bins. The larvae leave the grain when ready to pupate and congregate in great numbers in such locations.

### Also

Examine cleanings from elevator boots, conveyor systems, vacuum cleaner systems, and bag cleaners. Examine screenings from seed or grain samples.

